

CHAPTER 11

Cancer of the Gallbladder

James E. Everhart, M.D., M.P.H.

About 3,000 cases of gallbladder cancer were estimated to have occurred in 2004 (Table 1). Gallbladder cancer was the only digestive system malignancy that occurred predominantly among women (nearly twice the age-adjusted rate of men) and was one of the few nongenital cancers that had a female predominance. It was predominantly a diagnosis of the elderly, with a median age of diagnosis of age 73 years, the highest of any digestive system cancer (http://seer.cancer.gov/csr/1975_2005/results_merged/topic_med_age.pdf). Age-adjusted rates were too low to draw inferences about ethnic differences in risk. Incidence of gallbladder cancer declined by 42.2 percent from 1979 to 1997, and was then stable through 2004 (Figure 1). Five-year survival increased modestly to about 9 percent. Outpatient and inpatient data were too sparse to draw inferences, except that the rate of hospitalization with gallbladder cancer declined substantially until the mid-1990s and has been stable since (Figure 2).

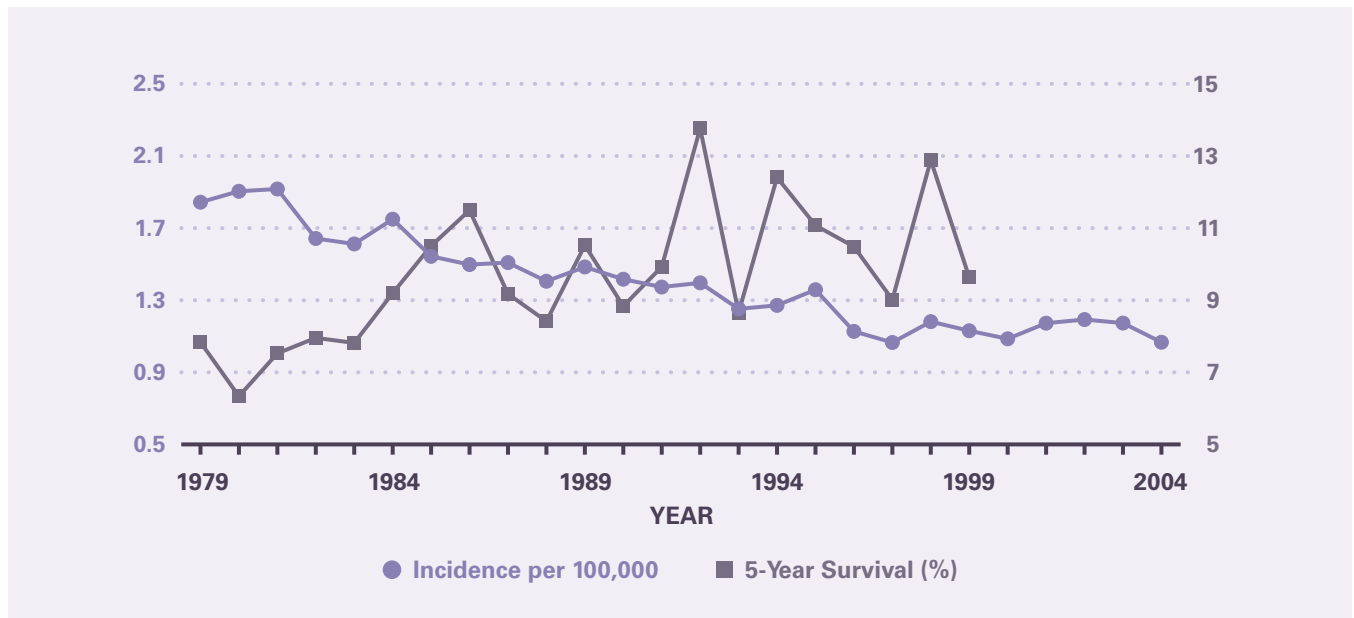
Because of low survival, gallbladder cancer mortality was similar to incidence. As underlying cause, there were nearly 2,000 deaths in 2004 and just under 11,000 YPLL prior to age 75 years (Table 3), which reflects the older age at which gallbladder cancer occurred. Rates were 6.8 times as high in the oldest age group (65 years and older) as among those ages 45–64 years. Age-adjusted mortality rates were higher for blacks than whites, and for females than males. The death rate for gallbladder cancer declined by 47 percent between 1979 and 2004 (Figure 3). Because gallstones are the major recognized risk factor for gallbladder cancer, it is of interest that there was a similar decline (56.1 percent) in gallstone disease-related mortality over that period.

Table 1. Gallbladder Cancer: Number of Cases and Incidence Rates by Age, Race/Ethnicity, and Sex, 2004

| DEMOGRAPHIC CHARACTERISTICS | | Number of Cases | INCIDENCE PER 100,000 | |
|-----------------------------|-------------------------------|-----------------|-----------------------|--------------|
| | | | Unadjusted | Age-Adjusted |
| AGE (Years) | Under 15 | — | — | — |
| | 15–44 | 79 | 0.1 | — |
| | 45–64 | 850 | 1.2 | — |
| | 65+ | 2,257 | 6.6 | — |
| RACE/ETHNICITY | Non-Hispanic White | 2,129 | 1.1 | 0.9 |
| | Non-Hispanic Black | 356 | 1.0 | 1.5 |
| | Hispanic | 348 | 0.9 | 1.9 |
| | Asian/Pacific Islander | 142 | 1.2 | 1.4 |
| | American Indian/Alaska Native | — | — | — |
| SEX | Female | 2,180 | 1.5 | 1.4 |
| | Male | 867 | 0.6 | 0.8 |
| TOTAL | | 3,034 | 1.1 | — |

SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program

Figure 1. Gallbladder Cancer: Age-Adjusted Incidence Rates and 5-Year Survival Rates, 1979–2004



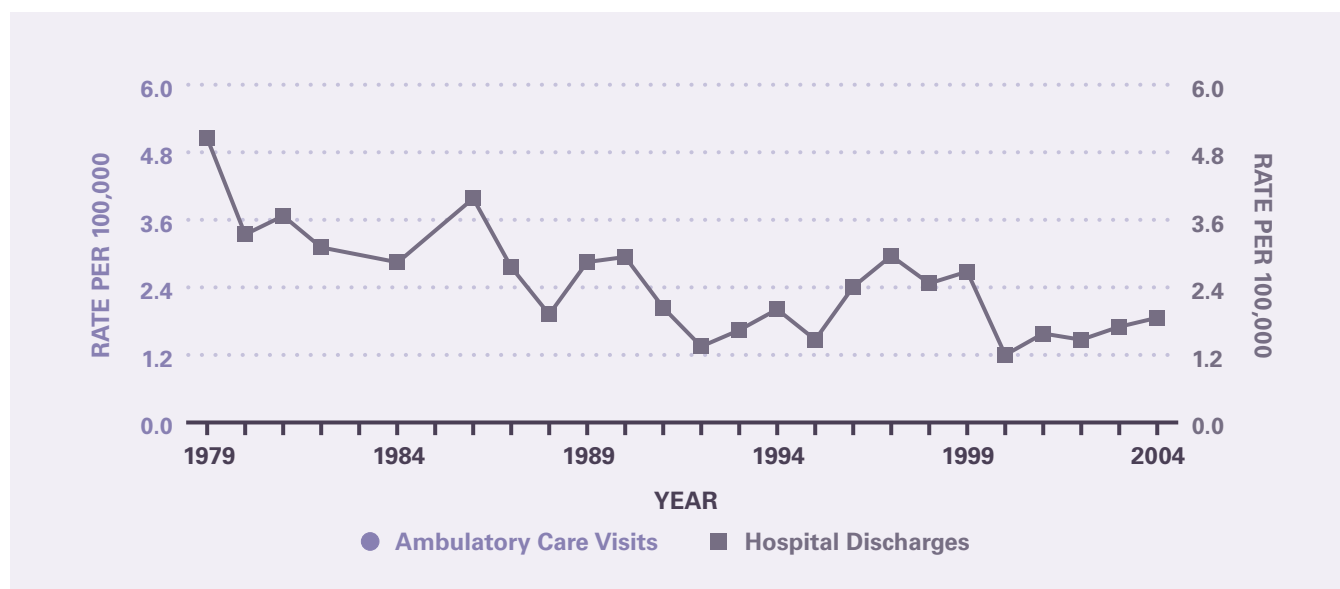
SOURCE: Surveillance, Epidemiology, and End Results (SEER) Program

Table 2. Gallbladder Cancer: Number and Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With First-Listed and All-Listed Diagnoses by Age, Race, and Sex in the United States, 2004

| DEMOGRAPHIC CHARACTERISTICS | AMBULATORY CARE VISITS | | | | HOSPITAL DISCHARGES | | | | |
|-----------------------------|------------------------|------------------|----------------------|------------------|------------------------|------------------|----------------------|------------------|----|
| | First-Listed Diagnosis | | All-Listed Diagnoses | | First-Listed Diagnosis | | All-Listed Diagnoses | | |
| | Number in Thousands | Rate per 100,000 | Number in Thousands | Rate per 100,000 | Number in Thousands | Rate per 100,000 | Number in Thousands | Rate per 100,000 | |
| AGE (Years) | Under 15 | — | — | — | — | — | — | — | |
| | 15–44 | — | — | — | — | — | 0 | 0 | |
| | 45–64 | — | — | — | — | 1 | 1 | 2 | |
| | 65+ | — | — | — | — | 2 | 6 | 4 | 11 |
| RACE | White | — | — | — | — | 2 | 1 | 5 | 2 |
| | Black | — | — | — | — | 0 | 1 | 1 | 2 |
| SEX | Female | — | — | — | — | 2 | 1 | 4 | 2 |
| | Male | — | — | — | — | 1 | 1 | 2 | 1 |
| TOTAL | — | — | — | — | 3 | 1 | 6 | 2 | |

SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (3-year average, 2003–2005), and Healthcare Cost and Utilization Project Nationwide Inpatient Sample (HCUP NIS)

Figure 2. Gallbladder Cancer: Age-Adjusted Rates of Ambulatory Care Visits and Hospital Discharges With All-Listed Diagnoses in the United States, 1979–2004 (Ambulatory Care Visit Data Unavailable)



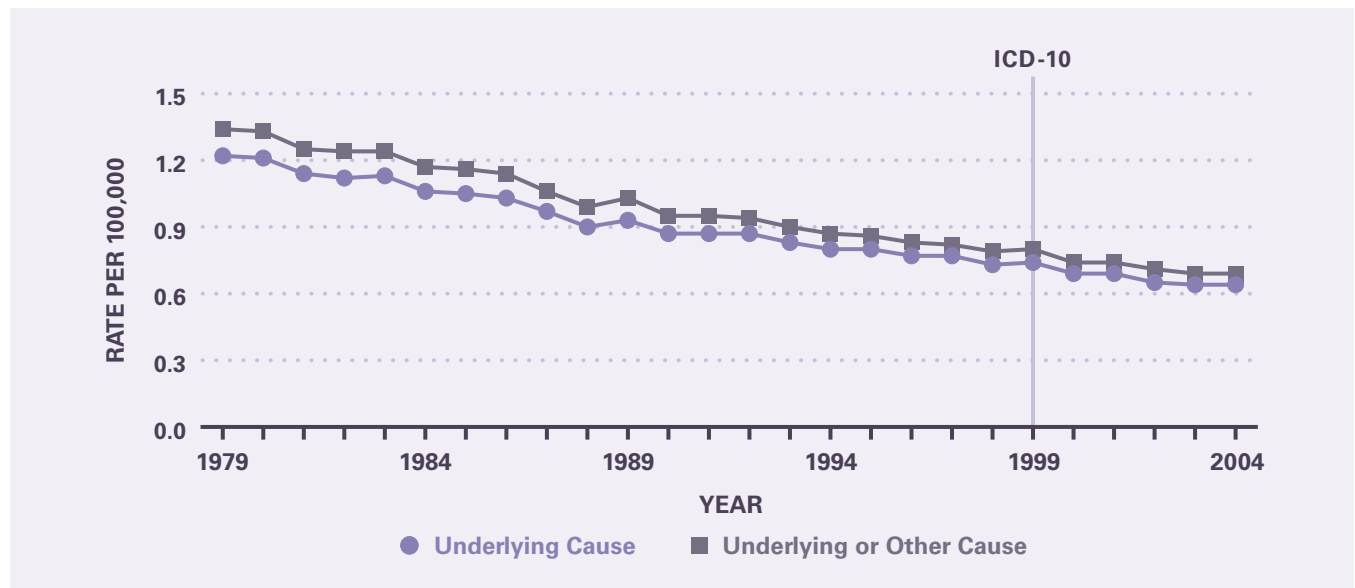
SOURCE: National Ambulatory Medical Care Survey (NAMCS) and National Hospital Ambulatory Medical Care Survey (NHAMCS) (averages 1992–1993, 1994–1996, 1997–1999, 2000–2002, 2003–2005), and National Hospital Discharge Survey (NHDS)

Table 3. Gallbladder Cancer: Number and Age-Adjusted Rates of Deaths and Years of Potential Life Lost (to Age 75) by Age, Race, and Sex in the United States, 2004

| DEMOGRAPHIC CHARACTERISTICS | UNDERLYING CAUSE | | | UNDERLYING OR OTHER CAUSE | |
|-----------------------------|------------------|------------------|---|---------------------------|------------------|
| | Number of Deaths | Rate per 100,000 | Years of Potential Life Lost in Thousands | Number of Deaths | Rate per 100,000 |
| AGE (Years) | Under 15 | — | — | — | — |
| | 15–44 | 41 | 0.0 | 44 | 0.0 |
| | 45–64 | 422 | 0.6 | 443 | 0.6 |
| | 65+ | 1,476 | 4.1 | 1,585 | 4.4 |
| RACE | White | 1,600 | 0.6 | 1,715 | 0.7 |
| | Black | 227 | 0.9 | 239 | 0.9 |
| SEX | Female | 1,343 | 0.8 | 1,422 | 0.8 |
| | Male | 596 | 0.5 | 650 | 0.5 |
| TOTAL | | 1,939 | 0.7 | 2,072 | 0.7 |

SOURCE: Vital Statistics of the United States

Figure 3. Gallbladder Cancer: Age-Adjusted Rates of Death in the United States, 1979–2004



SOURCE: Vital Statistics of the United States